

ABSTRACT

The invention relates to a device for actuating an articulated mast particularly for large manipulators and concrete pumps. Said articulated mast (22) is pivotally connected to a mast base (21) that is rotatable about a vertical axis and comprises at least three mast arms (23 to 27) which are pivotable to a limited extent about horizontal articulated axis (28 to 32) that are located parallel to each other, the pivoting movement being relative to the mast base (21) or an adjacent mast arm (23 to 27) and being performed by means of a respective drive unit (34 to 38). The inventive device further comprises a control unit for actuating the drive units for the mast movement. The control unit is provided with coordinate transformer (74, 76) which responds to a given guiding parameter (r) and measured angular values (ϵ_γ) that are determined by means of angle sensors (44 to 48) located on the mast arms (23 to 27). The coordinate transformer (74, 76) does a conversion into movement signals ($\Delta\alpha_v$) for the drive units (34 to 38) in accordance with predefined path/slew characteristics, said movement signals being related to the articulation axis. In order to make the inventive device lighter and easier to build, geodetic angle sensor (44 to 48) which determine geostationary measured angular values (ϵ_γ) that are assigned to the individual mast arms (23 to 27) are disposed in a rigid manner on the mast arms (23 to 27).